



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,061	04/05/2001	Chuan-Yu Hsu	9585-0103	3443
73552	7590	01/05/2009		
Stolowitz Ford Cowger LLP 621 SW Morrison St Suite 600 Portland, OR 97205			EXAMINER SAFAIPOUR, HOUSHANG	
			ART UNIT	PAPER NUMBER
			2625	
			MAIL DATE	DELIVERY MODE
			01/05/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/827,061

**Applicant(s)**

HSU ET AL.

**Examiner**

HOUSHANG SAFAIPOUR

**Art Unit**

2625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-49, 58-60, 62-64 and 66-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-49 is/are allowed.
- 6) ☒ Claim(s) 30-39, 58-60, 62, 64, 66, 67 and 69-71 is/are rejected.
- 7) ☒ Claim(s) 63, 68, 69 and 72 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment. Applicant argues that the cited prior art, by Casserly, does not teach neither a lens nor an imaging apparatus located within the accommodation space as recited by the amended claims. He further argues that the only element shown within the reflectors 12 and 14 of Casserly is a light source. Examiner agrees fully with the applicant. However, examiner adds that Casserly introduces the idea of using the inside walls of a shell body as reflection planes to reflect light. Therefore examiner uses Applicant's Admitted Prior Art (AAPA) as a primary references and Casserly as a second reference to reject the amended claims.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 30-35, 37, 58-60, 62, 66, 67, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) and further in view of Cassely (US 5,927,849)

Regarding claim 30, AAPA discloses optical chassis comprises a shell body (141) having an accommodation space defining a plurality of inside walls (fig. 2);

a plurality of reflection planes (143) located within the accommodation space, each of the reflection planes formed on a corresponding one of the inside walls (fig. 2).

a reflective plating film directly formed on at least a portion of each of the plurality of reflection planes to reflect light (please see the discussion below);

a lens (24) located within the accommodation space, wherein the lens is configured to receive light reflected from at least one of the reflection planes (fig. 2); and

an imaging apparatus (25) located within the accommodation space, wherein the imaging apparatus is configured to convert the light into electrical signals (fig. 2, please see "Description of the Prior Art in pages 1 and 2 of the specification).

AAPA shows mirrors 143 mounted on the plurality of planes within the accommodation space to reflect light. AAPA does not disclose using the planes as reflectors.

Cassarly discloses shell body (10) having a plurality of inside walls (12 and 14) defining an accommodation space;

a plurality of reflection planes (12A and 14A), each of the reflection planes formed on a corresponding one of the inside walls and covering only a portion of the plurality of the corresponding inside walls (12 and 14, fig. 1);

a reflective plating films directly formed on at least portion of the plurality of reflection planes to reflect light (col. 3, lines 41-43). Therefore it would have been obvious to a person of ordinary skill in the art to coat the reflective planes shown in fig. 2 of the AAPA with the coatings disclosed by Casserly in order to eliminate using mirrors and utilizing the planes as reflectors.

Regarding claim 31, Applicant's admitted prior art teaches a light source (142) coupled to the body to transmit light to one or more of the reflection planes (Fig 1 and 2).

For claim 32, Applicant's admitted prior art teaches wherein the shell body comprises at least a portion of an optical scanner (See Paragraph 005).

Considering claim 33, Applicant's admitted prior art teaches wherein the shell body and plurality of reflection planes are formed as a single piece (See Figs 1 and 2).

For claim 34, Applicant's admitted prior art teaches wherein the shell body having plurality of inside walls defining an accommodation space, wherein the shell body further comprises a lid body and a major body, and wherein the lid body and the major body are formed as separated pieces and assembled together (See Fig 1).

a plurality of reflection planes located within the accommodation space and formed in the major body; and reflective plating film directly coated on the plurality of reflection planes to reflect light (please refer to the discussion under claim 30).

For claim 35, Applicant's admitted prior art teaches wherein at least two of the plurality of inside walls are substantially opposed, and wherein a reflection plane is formed on each of the at least two substantially opposed inside walls (See Fig 2).

Considering claim 37, Applicant's admitted prior art teaches wherein at least a portion of the reflection planes are formed with predetermined angles (Fig 2).

Regarding claim 58, AAPA discloses an apparatus comprising:

a shell body of an optical scanning chassis having a plurality of inside walls defining an accommodation space; a first reflection plane formed on the shell body and covered with a reflective plating film; a second reflection plane formed on the shell body, wherein the second reflection plane is configured to receive light reflected from the first reflection plane; and a third reflection plane formed on the shell body, wherein the third reflection plane is configured to receive light reflected from the second reflection plane, and wherein the first, second, and third planes are located within the accommodation space (please refer to fig. 2 [shows three planes] and also the discussion under claim 3).

Regarding claims 59, 60 and 62 refer to figures 1 and 2 and also the discussion under claim 30.

Regarding claims 66 and 67, please refer to figure 2 and also the discussion under claim 30.

Regarding claims 69 and 70 please refer to figure 2.

Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA), in view of Cassarly et al. (US 5,927,849) and further in view of Vent (US 5,489,457).

Regarding claim 38, Vent teaches wherein the reflective plating film is coated with a protection materials (2:6-14; 4:1-20; 5:57-6:2).

For claim 39, Vent discloses wherein the protection material comprises at least one selected from the group including PE plastic films and macromolecular material (4:1-9).

Claims 64 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA further in view of Cassarly et al. (US 5,927,849), and further in view of Bundo et al. (US 6,354,901).

Regarding claims 64 and 71, Bundo discloses covering reflective planes using sputtering method. Therefore it would have been obvious to a person of ordinary skill in the art to use such method in combination of AAPA and Cassarly's invention.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA), in view of Cassarly et al. (US 5,927,849) and further in view of Murakami (US 4,460,939).

Considering claim 36, Murakami teaches wherein the reflective plating films comprises at least one selected from the group including silver, chromium, aluminum, and platinum, and alloys thereof(col. 2, lines 58-64).

***Allowable Subject Matter***

Claims 40-49 are allowed.

Claims 63, 68, 69 and 72 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipoor whose telephone number is (571)272-7412. The examiner can normally be reached on Mon.-Fri. from 6:00am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Houshang Safaipour/  
Primary Examiner, Art Unit 2625